VERIFY ALL DOCUMENTS FOR CURRENT REVISION AND PENDING CHANGES PRIOR TO EACH USE.
INIT_________ DATE_________

906-D-100

REV NO	DATE	REVISION	DR	CH	APPROVED		
B	8/6/90	REVISED AS CIRCLED	V.S.	RP	WC	FJES	FJES
C	10/15/90	REVISED PER EBAR No. 1448A & PER TA No. 1136	VS	WC	WC	WC	FJES
0	8/27/91	ER2172					
1	4-30-93	REV PER ECN 6284	GW	HB	ecc		
2	5-12-93	REVISED PER ECN 6290	EB	HB	DJR		
3	12-6-94	REV/FCN NOx-0345,0349	AJD	CIO	JRY		
4	4-12-95	REV/FCN NOX 1075	PD	KQ	JRY		

1. Allowable soil bearing (KSF): 500 PSF

	Normal Op. Loads	Transient + Normal Op. Loads
Slabs/Mats	6	8
CONDINSATE PIT	5	—

2. Frost penetration depth: 4'-0.

3. Cast in place concrete: f'c=4,000 PSI at 28 days.

4. Reinforcing steel shall be intermediate grade billet steel bars conforming to ASTM A615 (deformed bars) Grade 60.

5. Concrete materials, reinforcing and concrete work shall comply with the requirements of ACI 318 and ACI 301. Wherever there is a conflict, requirements of code ACI 318 shall govern.

6. Lap splices shall be Class B as per ACI 318, Unless otherwise noted.

7. Provide expansion joints as shown on Drawings.

8. Grout shall be as per WVNS Specification CS-205

9. Welded studs shall be "Nelson" Type H4L/S3L (unless noted), size as noted, or approval equal.

10. Carbon steel expansion anchors shall conform to Federal Specification FF-S-325 Group II, Type 4 Class 1, "HILTI" KWIK bolt II or approved equal. Unless otherwise noted center to center and Edge dimension are to be per manufacturer's recommendations and minimum embedment shall be as follows:

2 1/2" FOR 3/8 Ø; 3 1/2" FOR 1/2 Ø; 4" FOR 5/8 Ø; 4 3/4" FOR 3/4 Ø; 6" FOR 1 Ø. IF A HILTI BOLT IS WITHIN 1/2 OF THE STANDARD EMBEDMENT DEPTH TO EMBEDDED UNISTRUT, INC THE EMBEDMENT DEPTH OF THE HILTI BOLT BY 3 BOLT DIAMETERS.

11. Structural and misc. steel: fy = 36,000 PSI, ASTM A36 (unless noted)

12. Steel design, fabrication and erection shall be in accordance with AISC Manual of Steel Construction, 9th edition.

13. Anchor bolts: Fy = 36,000 PSI, ASTM A-307, unless otherwise noted.

14. Pipe sleeves, conduits and other embedments not shown on civil drawings shall be established by the subcontractor from other contract drawings. All embedded items shall be in place before concrete is placed.

15. Shop connections shall be welded, unless noted.

16. All structural welding shall be in accordance with the Structural Welding Code - AWS D1.1 , of the American Welding Society. Only low hydrogen electrodes shall be used. The interpass temperature for welding to embeds shall not exceed 250 °F. The maximum interpass temperature for welding stainless steel shall be 350 °F.

The weld metal to join the base metals shall be as follows:

a) AWS-A5.1 E70XX to join carbon steel to carbon steel.
b) ASME SFA 5.4., Classification E308 to join stainless steel to stainless steel.
c) ASME SFA 5.4.,Classification E309 to join stainless steel to carbon steel.

17. Field framing connections shall be high strength bolted connections made up with 7/8 Ø A325 bolts, unless noted. High strength bolted connections shall be considered as either slip critical or connections subject to direct tension, unless specifically noted on the contract drawing as snug tight only. Requirement for hardened washer shall be in accordance with Specification for structural Joints using ASTM A325 or A490 Bolts, 11/13/85.

18. The use of Shim plates under the column base plate will not be permitted upon final grouting.

19. Base plates are symmetrical about centerline of columns unless otherwise noted.

20. All contact surfaces within high-strength bolt connections and welding areas shall be free of oil, paint, lacquer, galvanizing or other deleterious material.

If any coating is present in the contact surfaces within the high strength bolted slip critical connections, the coating shall be qualified as Class A or Class C in strict accordance with the specification for structural joints using ASTM A325 or A490 Bolts, 11/13/85, by the subcontractor.

21. All steel surfaces that are to be encased in the finished concrete shall be unpainted. All other surfaces of steel members shall receive specified primer & paint, except as noted in Note No. 20.

22. Provide 3/16" diameter nailing holes in embedded structural items spaced and located as required to facilitate attachment to forms. Holes in the embeds shall be plug welded and ground flush after installation.

23. Subcontractor shall furnish all plates, clip angles, connections, etc required for the completion of the structure even if every such item is not shown on drawings.

24. Subcontractor shall verify all dimensions before fabrication, erection, or construction.

25. Adequate tempo[illegible]cing, supports, shoring and scaffolding should be prov[illegible]ring construction and until all new construction ele[illegible]ts achieve their required strengths.

26. Unless noted all work to be performed in accordance with WVNS Specification WVNS-CS-205.

27. Unless noted, grating shall be rectangular welded type with 1-1/4 x 3/16 bearing bars spaced 1 3/16 on centers and cross bars spaced not more than 4 on centers. It shall be securely fastened to supporting steel by grating clips as per manufacturer's recommendation.

28. Deck panels shall be fastened to the steel framework at ends and at intermediate supports by welds through the deck panels not less than 3/4" Ø spaced not more than 12" across the width . End closures of the panels are to be fastened by tack welding or with sheet metal screws spaced not more than 4'-0 on centers. Side closures of the panels are to be fastened by tack welding not more than 3'-0 on centers. Sheet metal screws shall not be used for side closures. Each deck unit shall be brought to proper bearing on the supporting beams and adjusted to final position before being permanently fastened. In the event [illegible] manufacturer's recommendations are different from the ab[illegible] requirements the more stringent requirements shall go[illegible]

29. Size of seal weld not called out shall be at least 1/[illegible]

30. REFERENCE TO ROUGHHENED CONCRETE MEANS ROUGHEN TO 1/4" MIN AMPLETUDE.

31. SHIM AS REQ'D BEHIND MOUNTING PLATES TO PROVIDE LEVEL PLATE INSTALLATION.

32. ⚠4 PENETRATION SEALANT SCHEDULE UNLESS OTHERWISE NOTED ON DESIGN DWG.

SEALANT OR DETAIL	LOCATION	DESIGN TEMP	APPLICATION	PENETRANT
GROUT	01-14 CELL OFF-GAS TRENCH HORIZ PIPE CHASE	< 260°F	PIPING/TUBING	CORE-BORE/SLV
RTV FOAM SIMILAR TO DETAIL AS FIGS ON 906D-227, SH1	CONCRETE FLOORS WALLS	< 260°F	↓	↓
MINERAL WOOL & CAULK SIMILAR TO DET 'E' ON 906D-451, SH1	↓	260°F TO 600°F	↓	↓
MINERAL WOOL & CAULK SIMILAR TO DET 'E' ON 906D-451, SH1	BLOCK WALLS	< 832°F	↓	↓
DET 01P200 906D-107 (K11)	01-14 CELL	> 600°F	↓	↓

FOR DRAWING INDEX SEE DRAWING NO. ____________

WVNS APPROVAL
COG. MGR. V. DesCamp
COG. ENGR. R. P. Vitko 8/7/91
DRFT. SUPR. [signature]
Q.A. MGR. [signature] 5/11/93
SYST ENGR [signature] 14 May 93

APPRVD WVNS CO.		EBASCO SERVICES INCORPORATED A/E O.F.S. NO. 2388 TASK ORDER 025
PROJECT MGR [signature]	5/29/90	FOR WEST VALLEY NUCLEAR SERVICES COMPANY, INC WEST VALLEY, NEW YORK
ENGINEER SUPV [signature]	5/29/90	
LEAD DISC ENGR [signature]	5/29/90	WEST VALLEY DEMONSTRATION PROJECT
DESIGN [signature]	5/29/90	VITRIFICATION FACILITY
CHECKED R. PARASHURAMA	5-29-90	OFF - GAS SYSTEM
DRAWN V. SEKERKA	DATE 5/24/90	CIVIL GENERAL NOTES

DE-AC07-81NE44139 PROJECT NO.	SIZE D	INDEX CODE NUMBER (AREA / DR. TYP / CL / ORIG)	DRAWING NO. 906D-100	REV. 4
19-CWV-02275 SUBCONTRACT NO.				
ISSUED FOR CONSTRUCTION	SCALE NONE	SPEC. CODES	A/E SHEET NO. 906-D-100	C